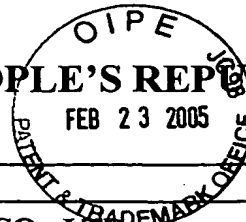


# THE PATENT OFFICE OF THE PEOPLE'S REPUBLIC OF CHINA

Address: 6 Xi Tu Cheng Lu, Haidian, Beijing

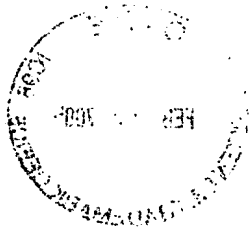
Post Code: 100088



Applicant:	NISSAN MOTOR CO., LTD.	Date of Notification: Date: <u>17</u> Month: <u>12</u> Year: <u>2004</u>
Attorney:	WANG YONGGANG	
Application No.:	03159488.3	
Title of the Invention:	BIPOLAR BATTERY	

## Notification of the First Office Action

- 1 ☒ The applicant requested examination as to substance and examination has been carried out on the above-identified patent application for invention under Article 35(1) of the Patent Law of the People's Republic of China(hereinafter referred to as "the Patent Law").  
☐ The Chinese Patent Office has decided to examine the application on its own initiative under Article 35(2) of the Patent Law.
- 2 ☒ The applicant claimed priority/priorities based on the application(s):  
 filed in JP on 08/10/2002, filed in \_\_\_\_\_ on \_\_\_\_\_,  
 filed in \_\_\_\_\_ on \_\_\_\_\_, filed in \_\_\_\_\_ on \_\_\_\_\_,  
 filed in \_\_\_\_\_ on \_\_\_\_\_, filed in \_\_\_\_\_ on \_\_\_\_\_,  
☒ The applicant has provided the priority documents certified by the Patent Office where the priority application(s) was/were filed.  
☐ The applicant has not provided the priority documents certified by the Patent Office where the priority application(s) was/were filed and therefore the priority claim(s) is/are deemed not to have been made under Article 30 of the Patent Law.  
☐ The application is a PCT continuation.
- 3 ☐ The applicant submitted amendments to the application on \_\_\_\_\_ and on \_\_\_\_\_, wherein the amended \_\_\_\_\_ submitted on \_\_\_\_\_ and \_\_\_\_\_ the amended \_\_\_\_\_ submitted on \_\_\_\_\_ are not acceptable, because said amendments do not comply with ☐Article 33 of the Patent Law.  
☐Rule 51 of the Implementing Regulations of the Patent Law.  
 The specific reasons why the amendments are not allowable are set forth in the text portion of this Notification.
- 4 ☒ Examination as to substance was directed to the initial application documents as filed.  
☐ Examination as to substance was directed to the documents as specified below:  
 pages \_\_\_\_\_ of the description, claims \_\_\_\_\_ and pages \_\_\_\_\_ of the drawings submitted on \_\_\_\_\_,  
 pages \_\_\_\_\_ of the description, claims \_\_\_\_\_ and pages \_\_\_\_\_ of the drawings submitted on \_\_\_\_\_,  
 pages \_\_\_\_\_ of the description, claims \_\_\_\_\_ and pages \_\_\_\_\_ of the drawings submitted on \_\_\_\_\_,  
 the abstract submitted on \_\_\_\_\_, and the figure for the abstract submitted on \_\_\_\_\_.
- 5 ☐ This Notification is issued without search reports.  
☒ This Notification is issued with consideration of the search results.  
☒ Below is/are the reference document(s) cited in this Office Action(the reference number(s) will be used throughout the examination procedure):



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No.	Number(s) or Title(s) of Reference(s)	Date of Publication (or the filing date of conflicting application)
1	JP 特开平 11-204136A	Date: <u>30</u> Month: <u>7</u> Year: <u>1999</u>
2		Date: <u>  </u> Month: <u>  </u> Year: <u>  </u>

6. Conclusions of the Action:

- ☐ On the Specification:
- ☐ The subject matter contained in the application is not patentable under Article 5 of the Patent Law.
  - ☐ The description does not comply with Article 26 paragraph 3 of the Patent Law.
  - ☐ The draft of the description does not comply with Rule 18 of the Implementing Regulations.
- ☒ On the Claims:
- ☐ Claim(s)        is/are not patentable under Article 25 of the Patent Law.
  - ☐ Claim(s)        does/do not comply with the definition of inventions prescribed by Rule 2 paragraph 1 of the Implementing Regulations.
  - ☒ Claim(s) 1,4 does/do not possess the novelty as required by Article 22 paragraph 2 of the Patent Law.
  - ☒ Claim(s) 2-3,5-8 does/do not possess the inventiveness as required by Article 22 paragraph 3 of the Patent Law.
  - ☐ Claim(s)        does/do not possess the practical applicability as required by Article 22 paragraph 4 of the Patent Law.
  - ☐ Claim(s)        does/do not comply with Article 26 paragraph 4 of the Patent Law.
  - ☐ Claim(s)        does/do not comply with Article 31 paragraph 1 of the Patent Law.
  - ☐ Claim(s)        does/do not comply with the provisions of Rules 20-23 of the Implementing Regulations.
  - ☐ Claim(s)        does/do not comply with Article 9 of the Patent Law.
  - ☐ Claim(s)        does/do not comply with the provisions of Rule 12 paragraph 1 of the Implementing Regulations.

7. In view of the conclusions set forth above, the Examiner is of the opinion that:

- ☐ The applicant should make amendments as directed in the text portion of the Notification.
- ☐ The applicant should expound in the response reasons why the application is patentable and make amendments to the application where there are deficiencies as pointed out in the text portion of the Notification, otherwise, the application will not be allowed.
- ☒ The application contains no allowable invention, and therefore, if the applicant fails to submit sufficient reasons to prove that the application does have merits, it will be rejected.

8. The followings should be taken into consideration by the applicant in making the response:

- (1) Under Article 37 of the Patent Law, the applicant should respond to the office action within 4 months counting from the date of receipt of the Notification. If, without any justified reason, the time limit is not met, the application shall be deemed to have been withdrawn.
- (2) Any amendments to the application should be in conformity with the provisions of Article 33 of the Patent Law. Substitution pages should be in duplicate and the format of the substitution should be in conformity with the relevant provision contained in "The Examination Guidelines".
- (3) The response to the Notification and/or revision of the application should be mailed to or handed over to the "Reception Division" of the Patent Office, and documents not mailed or handed over to the Reception Divisions have no legal effect.
- (4) Without an appointment, the applicant and/or his agent shall not interview with the Examiner in the Patent Office.

9. This Notification contains a text portion of 2 pages and the following attachments:

- ☒ 1 cited reference(s), totaling 3 pages. ☐

Examination Dept.   A   Examiner:   LI HUA   Seal of the Examination Department

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### **Text of Notification of the First Office Action**

The application relates to a bipolar battery. After examination, the examiner comes to the following opinions.

1. Claim 1 seeks protection of a bipolar battery. Reference 1 discloses a bipolar battery (see col. 2, paragraphs 9-11). Said bipolar battery comprises a positive electrode layer (12) on one side of a collecting foil, and a negative electrode layer (14) on the other side of the collecting foil; and a polymer electrolyte layer (10) disposed between the bipolar electrodes, wherein an insulation layer (22) is provided on a periphery of at least one side of the collecting foil. Accordingly, Reference 1 discloses all features of claim 1; moreover, both Reference 1 and the application belong to the same field, solve the same problem, contain the same solution, and lead to the same effect. Therefore, claim 1 does not have the novelty as required by Article 22 (2) of the Chinese Patent Law (CPL).

2. Reference 1 discloses the feature of "the insulation layer (22) provided on the periphery of the collecting foil is protruded outward beyond the collecting foil" (see Fig. 1), and discloses that the feature is included for preventing short circuit. Thus, in light of Reference 1, it will be obvious to those skilled in the field to conceive the idea of making a protruding length longer than a thickness of one single cell. Namely, it will be obvious to those skilled in the field to obtain the solution to be protected by claim 2 based on the teachings of Reference 1. Therefore, claim 2 does not possess a substantive feature and does not represent a notable progress, and thus does not have the inventiveness as required by Article 22 (3) of the CPL.

3. The insulation layer is provided on the periphery of the collecting foil for preventing short circuit. For a better effect of preventing short circuit, those skilled in the field will conceive the idea of bonding the insulation layer to the collecting foil without a creative work. Namely, it will be obvious to those skilled in the field to obtain the solution to be protected by claim 3 based on the teachings of Reference 1. Therefore, claim 3 does not possess a substantive feature and does not represent a notable progress, and thus does not have the inventiveness as required by Article 22 (3) of the CPL.

4. Reference 1 discloses that the insulation layer (22) is made of PE, PP or PTFE, i.e. the insulation layer is flexible (see col. 2, paragraph 11). Namely, Reference 1 discloses all features of claim 4; moreover, both Reference 1 and the application belong to the same field, solve the same problem, contain the same solution, and lead to the same effect. Therefore, claim 4 does not have the novelty as required by Article 22 (2) of the CPL.

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5. The additional features are defined in claims 5-7 for a better effect of preventing short circuit. It will be obvious to those skilled in the field to conceive the idea of covering the ends of respective bipolar electrodes. Namely, it will be obvious to those skilled in the field to obtain the solutions to be protected by claims 5-7 based on the teachings of Reference 1. Therefore, claims 5-7 do not possess a substantive feature and do not represent a notable progress, and thus do not have the inventiveness as required by Article 22 (3) of the CPL.

6. Claim 8 seeks protection of vehicle comprising a power source having a bipolar battery. Reference 1 discloses a bipolar battery (see col. 2, paragraphs 9-11). Said bipolar battery comprises a positive electrode layer (12) on one side of a collecting foil, and a negative electrode layer (14) on the other side of the collecting foil; and a polymer electrolyte layer (10) disposed between the bipolar electrodes, wherein an insulation layer (22) is provided on a periphery of at least one side of the collecting foil. Accordingly, Reference 1 discloses all features of claim 8. It will be obvious to those skilled in the field to obtain the solution to be protected by claim 8 by applying the battery claimed in claim 1 to a vehicle. No creative work will be needed. Moreover, such an application does not have any unexpected effects. Therefore, claim 8 does not have a substantive feature and does not represent a notable progress, and thus does not have the inventiveness as required by Article 22 (3) of the CPL.

In a conclusion, the independent and dependent claims of the application do not have the novelty and inventiveness, meanwhile, the description records no allowable invention. Therefore, even if the applicant recombines and/or further defines the claims according to the recordings of the description, the application will have no prospect of being allowed. If the applicant fails to expound sufficient why the invention has the novelty and inventiveness, the application will be finally rejected under Article 38 and Rule 53.

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**The Articles and the Rules cited by the examiner**

**Article 22** Any invention or utility model for which patent right may be granted must possess novelty, inventiveness and practical applicability.

Novelty means that, before the date of filing, no identical invention or utility model has been publicly disclosed in publications in the country or abroad or has been publicly used or made known to the public by any other means in the country, nor has any other person filed previously with the Patent Administration Department Under the State Council an application which described the identical invention or utility model and was published after the said date of filing.

Inventiveness means that, as compared with the technology existing before the date of filing, the invention has prominent substantive features and represents a notable progress and that the utility model has substantive features and represents progress.

Practical applicability means that the invention or utility model can be made or used and can produce effective results.

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34

# 中华人民共和国国家知识产权局

邮政编码: 100037 北京市阜成门外大街2号万通新世界广场8层 中国国际贸易促进委员会专利商标事务所 王永刚		发文日期 
E032398	申请号: 031594883	
申请人: 日产自动车株式会社		
发明创造名称: 双极电池		

## 第一次审查意见通知书

- ☒ 应申请人提出的实审请求, 根据专利法第35条第1款的规定, 国家知识产权局对上述发明专利申请进行实质审查。  
☐ 根据专利法第35条第2款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。
- ☒ 申请人要求以在:  
JP 专利局的申请日 2002年10月08日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日。  
☒ 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。  
☐ 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本, 根据专利法第30条的规定视为未提出优先权要求。
- ☐ 经审查, 申请人于:  
年 月 日提交的 不符合实施细则第51条的规定;  
年 月 日提交的 不符合专利法第33条的规定;  
年 月 日提交的
- 审查针对的申请文件:  
☒ 原始申请文件。 ☐ 审查是针对下述申请文件的  
申请日提交的原始申请文件的权利要求第 项、说明书第 页、附图第 页;  
年 月 日提交的权利要求第 项、说明书第 页、附图第 页;  
年 月 日提交的权利要求第 项、说明书第 页、附图第 页;  
年 月 日提交的权利要求第 项、说明书第 页、附图第 页;  
年 月 日提交的说明书摘要, 年 月 日提交的摘要附图。
- ☐ 本通知书是在未进行检索的情况下作出的。  
☒ 本通知书是在进行了检索的情况下作出的。  
☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):  
编号 文件号或名称 公开日期(或抵触申请的申请日)  
1 JP特开平11-204136A 1999-07-30
- 审查的结论性意见:  
☐ 关于说明书:  
☐ 申请的内容属于专利法第5条规定的不授予专利权的范围。  
☐ 说明书不符合专利法第26条第3款的规定。



- ☐ 说明书不符合专利法第 33 条的规定。  
☐ 说明书的撰写不符合实施细则第 18 条的规定。

☐

☒ 关于权利要求书:

- ☒ 权利要求 1, 4 不具备专利法第 22 条第 2 款规定的新颖性。  
☒ 权利要求 2-3, 5-8 不具备专利法第 22 条第 3 款规定的创造性。  
☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。  
☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。  
☐ 权利要求 不符合专利法第 26 条第 4 款的规定。  
☐ 权利要求 不符合专利法第 31 条第 1 款的规定。  
☐ 权利要求 不符合专利法第 33 条的规定。  
☐ 权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。  
☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。  
☐ 权利要求 不符合专利法实施细则第 20 条的规定。  
☐ 权利要求 不符合专利法实施细则第 21 条的规定。  
☐ 权利要求 不符合专利法实施细则第 22 条的规定。  
☐ 权利要求 不符合专利法实施细则第 23 条的规定。

☐

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。  
☐ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。  
☒ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

☐

8. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。  
(2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。  
(3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。  
(4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

9. 本通知书正文部分共有 2 页, 并附有下列附件:

- ☒ 引用的对比文件的复印件共 1 份 3 页。 ☐

审查员: 李华(A21)

2004 年 11 月 30 日



审查部门 电学发明审查部

21301  
2002.8



回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收  
(注: 凡寄给审查员个人的信函不具有法律效力)

## 第一次审查意见通知书正文

申请号：031594883

本申请涉及一种双极电池，经审查，意见如下。

1. 权利要求1请求保护一种双极电池，对比文件1（参见说明书第2栏第9-11段，图1）公开了一种双极电池。该电池具有在集电箔的一侧上的正极层12和集电箔的另一侧上的负极层14的双极电极；和在双极电极之间设置的聚合物电解质层10，在集电箔至少一侧的外围上设置绝缘层22。由此可见，对比文件1公开了权利要求1的所有技术特征，并且两者属于相同的技术领域，为了解决相同的技术问题，采用相同的技术方案，达到相同的技术效果。因此，权利要求1不具有新颖性，不符合专利法第22条第2款的规定。

2. 对比文件1（参见图1）公开了在集电箔的外围上设置绝缘层22向外突出到集电箔之外这一技术特征，并且采用这一技术特征是为了防止短路。因此，本领域技术人员在对比文件1的启示下为了防止短路，想到使突出长度长于一个单电池的厚度是容易的。因此，本领域技术人员在对比文件1的基础上得到权利要求2请求保护的技术方案是显而易见的。因此，权利要求2不具有突出的实质性特点和显著的进步，不符合专利法第22条第3款规定的创造性。

3. 在集电箔的外围设置绝缘层，是为了防止短路。为了更好的防止短路，本领域技术人员，想到将绝缘层粘接到集电箔上是不需要创造性劳动的。因此，本领域技术人员在对比文件1的基础上得到权利要求3请求保护的技术方案是显而易见的。因此，权利要求3不具有突出的实质性特点和显著的进步，不符合专利法第22条第3款规定的创造性。

4. 对比文件1（参见说明书第2栏第11段）公开了绝缘层22由PE、PP、PTFE制成（即绝缘层是挠性的）。由此可见，对比文件1公开了权利要求4的所有技术特征，并且两者属于相同的技术领域，为了解决相同的技术问题，采用相同的技术方案，达到相同的技术效果。因此，权利要求4不具有新颖性，不符合专利法第22条第2款的规定。

5. 权利要求5、6、7的附加技术特征都是为了更好的防止短路，本领域技术人员想到用粘性绝缘层覆盖各双极电极的端部是容易的。因此，本领域技术人员在对比文件的基础上分别得到权利要求5、6、7请求保护的技术方案是显而易见的。因此，

权利要求5、6、7不具有突出的实质性特点和显著的进步，不符合专利法第22条第3款规定的创造性。

6. 权利要求8请求保护一种车辆，该车辆包括具有双极电池的电源。对比文件1（参见说明书第2栏第9-11段，图1）公开了一种双极电池。该电池具有在集电箔的一侧上的正极层12和集电箔的另一侧上的负极层14的双极电极；和在双极电极之间设置的聚合物电解质层10，在集电箔至少一侧的外围上设置绝缘层22。由此可见，对比文件1公开了权利要求8中所述电池的所有技术特征。本领域技术人员将对比文件1所述的电池应用到车辆上得到权利要求8请求保护的技术方案是不需要创造性劳动的，并且也没有带来意想不到的技术效果。因此，权利要求8不具有突出的实质性特点和显著的进步，不符合专利法第22条第3款规定的创造性。

基于上述理由，本申请的独立权利要求以及从属权利要求都不具备新颖性或创造性，同时说明书中也没有记载其他任何可以授予专利权的实质性内容，因而即使申请人对权利要求进行重新组合和 / 或根据说明书记载的内容作进一步的限定，本申请也不具备被授予专利权的前景。如果申请人不能在本通知书规定的答复期限内提出表明本申请具有创造性的充分理由，本申请将被驳回。

审查员：李华

代码：A217